

posed of cells arranged in irregular lines; cells large, broadly oval; openings of the same shape as the cells, though smaller, by the projection inwards of the wall of the cell. Between the cells are numerous small interspaces formed by the inaccurate apposition of the cells. In this species we found no ovarian vesicles. The common base of the colony is longitudinally and obliquely striate.

Descriptions of Three New Species of Starfishes from Cape St. Lucas.

BY JOHN XANTUS.

1. *ASTERIAS SERTULIFERA*, Xantus.

With five moderately tapering and somewhat angular arms. Length of each arm about two and a quarter times the diameter of the disk. Ambulacral spines very slender, flattened, linear, mostly in a single row. Exterior to them, on the ventral side, a double or treble row of stouter spines of equal length, also somewhat flattened, with blunt extremities. Back of the arm with five pretty regular rows of cylindrical or moderately-tapering spines nearly as large as those on the belly. The lateral rows are more regular than the others, and the spines of these rows arise from a very regular series of subtriangular ossicles, one spine to every alternate ossicle. These back-spines are all crowned at or near their tips with a thick wreath of minute pedicellariæ. No pedicellariæ in the intervals between the spines. Rarely a large pedicellaria in the ambulacral furrows.

Diameter, four and a half inches.

Related to *A. glacialis*.

Found on rocks at low-water mark.

2. *HELIASTER MICROBRACHIA*, Xantus.

Arms thirty-five in number, each in length forming about one-eighth the entire diameter of the body. Ambulacral pores very small, in four rows. Ambulacral spines stout, blunt, and forming a single row. Lateral spines of the arms compressed, very broad and flat, often bifurcated at their extremities. Dorsal spines very small and numerous, uniformly distributed, scattered without order over the surface of the disk and arms.

Diameter, seven inches.

3. *HELIASTER KUBINII*, Xantus.

Arms twenty-two to twenty-four in number, each in length forming rather less than one-third the whole diameter of the body. Ambulacral spines in a single row. Ventral spines compressed at their extremities. Dorsal spines capitate, in four to six series on the back of the arms; on the disk much larger and less numerous, and with flat or even concave tops. Pedicellariæ thickly distributed between the spines.

Diameter, seven inches.

Collected at Cerro Blanco, off Cape St. Lucas.

I take pleasure in dedicating this species to my countryman M. Kubiniji, the accomplished Director of the Hungarian National Museum at Pesh.

Type specimens of all of the above species have been transmitted to the Museum of the Smithsonian Institution.

Descriptions of Two New Species of *Pimelodus*, from Kansas.

BY CHARLES C. ABBOTT.

1 *Pimelodus Hammondii*, Abbott.—*Spec. char.* Body slender, elongated, and much compressed; the dorsal outline anterior to the dorsal fin, and the facial outline, descend obliquely to the margin of the jaws, without curva-

[Dec.

ture. The head is much depressed, and very broad, constituting somewhat less than one-fifth of the total length. The mouth is small, and has the upper jaw the longer. The maxillar barbles extend a slight distance beyond the branchial aperture. The eye is of medium size, circular; its diameter entering six times in the length of the side of the head; the orbits are nearly four diameters apart. The spine of the dorsal fin is perfectly smooth; and the spine of the pectoral very coarsely serrated. The caudal fin is moderately forked.

The numbers of the fin rays are D, 1-6. P, 1-10. V, 8. A, 24. C, 27 -
5

Color. In alcoholic specimens, the head, back and upper half of the sides are bright sienna; the belly silvery white. Margin of the dorsal, caudal, and anal fins, glossy black; the marking on the anal broader and not so deep. Numerous small, circular black spots are scattered irregularly over the body, in appearance similar to those of the Trout (*S. fontinalis*), except in color.

Habitat. Fort Reily, Kansas.

This species is named in honor of Dr. Wm. A. Hammond, who has presented the Academy with many new and valuable western fishes.

2. *Pimelodons notatus*, Abbott.—*Spec. char.* The head and body are very much compressed, and the body tapers rapidly to the tail. The peduncle of the tail is slender and increases in width as it approaches the insertion of the fin. The facial outline is very oblique, and with the dorsal outline makes considerable curvature, from the anterior insertion of the dorsal fin to the extremity of the upper jaw. The eyes are large, situated equidistantly between the extremity of the upper jaw and margin of the opercle; the diameter of the orbit is contained four times in the length of the side of the head. The spines of both dorsal and pectoral fins are finally serrated. The anterior insertion of the dorsal fin is equidistant between the insertions of the pectoral and ventral fins. The extremities of the rays of the pectoral extend to the insertion of the ventral fins. The extremities of the rays of the ventral extend beyond the anterior insertion of the anal fin. The anal fin is large; the base equal to one-fourth of the total length. The caudal fin is very deeply forked.

The numbers of the fin-rays are D, V, A, C.

Color. In alcoholic specimens, the head and back are umber color; sides and belly yellowish, with metallic lustre. A circular black spot exists at the origin of the lateral line.

Total length seven inches.

Habitat. Fort Reily, Kansas.

Dr. Wm. A. Hammond has presented the Academy with a single specimen of this *Pimelodus*.

Descriptions of new North American Coleoptera, in the Cabinet of the Entomological Society of Philadelphia.

BY GEO. H. HORN.

NOMARETUS Lec.

N. imperfectus.—Black, smooth and glossy; antennæ and palpi rufous; thorax cordate, canaliculate, narrowed posteriorly, with a slight transverse and rather deep basal impression; elytra each four striate, striæ punctate, and decreasing in length from the suture outwardly, fourth stria obsolescent, the arrangement of the striæ forms an oblong space, which is slightly flattened, sides of elytra smooth and glossy.

Length .40.

Plate 8, fig. 1.

This beautiful little insect, of which but few specimens have been obtained, has been found only in Hampshire county, Virginia, in the most rocky portions 1860.]